

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE 2005/000528

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01N 33/72, C07D 233/86  
According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01N, C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, MEDLINE, BIOSIS, EMBASE, CA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Per Rydberg et al, "Applicability of a Modified Edman Procedure for Measurement of Protein Adducts: Mechanisms of Formation and Degradation of Phenylthiohydantoins"; Chem. Res. Toxicol, 2002, Vol. 15, pages 570-581 --	1-46,48-52
A	Steven G. Carmella et al, "Ethylation and methylation of hemoglobin in smokers and non-smokers"; Carcinogenesis, 2002, Vol. 23, No. 11. pages 1903-1910 --	1-46,48-52

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 10 August 2005	Date of mailing of the international search report 11 -08- 2005
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 12 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer  PATRICK ANDERSSON/E1s Telephone No. +46 8 782 25 00

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>STN International, File CAPLUS, CAPLUS accession no. 1971:420961, document no. 75:20961, Kawauchi, Hiroshi; Tuzimura, Katura, "Reaction of fluorescein-isothiocyanate with proteins and amino acids III. Syntheses of trifluoroacetic acid salts of fluorescein-thiohydantoin amino acids and their spectrometric studies"; Agricultural and Biological Chemistry (1971), 35(2), 150-7</p> <p style="text-align: center;">-- -----</p>	45-46, 50

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 4 7  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
  
Claim 47 relates to a container provided with means for performing step a) -c) in claim 1, it its unclear from the  
.../...
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

The following separate inventions were identified:

I: Claims 1-44, 47-49 and 51-52 as well as parts of claims 45-46 and 50 directed to a method etc. for analyzing N-terminal protein adducts using fluorescent isothiocyanates with the  
.../...

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

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Box II.2

claims and the description what unique means said container is provided with. Consequently, claim 47 lacks to comply with the demand for clarity of PCT article 5

Box III

exception of reagents having a directly bound phenyl or pentafluorophenyl group, and the compound DABTH in claim 45.

II-VIII: Claims 45-46 and 50 directed to the different compounds of claim 45.

The present application has been considered to contain nine inventions which are not linked such that they form a single general inventive concept, as required by Rule 13 PCT for the following reasons:

The single general concept of the compounds of claim 45 present application is that they are fluorescent Edman reagents reacted with different amino acids. They are not particularly adapted for the method of claims 1-33.

Document Kawauchi H et al, "Reaction of fluorescein-isocyanate with proteins and aminoacids. III. Syntheses of trifluoroacetic acid salts of fluorescein-thiohydantoin amino acids and their spectrometric studies", Agriculture and Biological Chemistry 1971, volym 35(2), pages 150-7, (abstract), CAPLUS[online] retrieved 2005-02-02 I STN International, Columbus, Ohio, USA. Accession No. 1975:4209619 discloses different amino acid-derivates of fluorescein-isothiocyanate for use in spectrophotometric methods.

Hence, the single general concept is known/obvious and cannot be considered as a single general inventive concept in the sense of Rule 13.1 PCT.

No other features can be distinguished which can be considered as same or corresponding special technical features in the sense of Rule 13.2 PCT.

Thus, the application lacks unity of invention.